BAB IX

DISKUSI DAN KESIMPULAN

IX.1 Diskusi

A. Teknis

1. Kapasitas produksi

Kapasitas produksi pabrik Calcium Chloride ditetapkan 540.000 ton / tahun diharapkan mampu mencukupi kebutuhan ekspor-impor Calcium Chloride. Calcium Chloride merupakan bahan multi fungsi yaitu digunakan dalam industri makanan, industri farmasi, industri kertas, industri korek api, industri minuman, industri kosmetik, dan lain-lain.

2. Bahan baku

Bahan baku yang digunakan untuk pembuatan Calcium Chloride ini adalah HCl dan limbah $Ca(OH)_2$.

Bahan baku limbah $Ca(OH)_2$ dapat diperoleh dari pabrik gas asetilen yang ada di Surabaya. Sedangkan untuk HCl, dapat diperoleh dari distributor di Surabaya.

3. Proses

Proses pembuatan Calcium Chloride dari limbah $Ca(OH)_2$ menggunakan proses asam menghasilkan produk Calcium Chloride.

DAFTAR PUSTAKA

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Austin, G.T., 1996, "Shreve's Chemical Process Industries", ed.2, McGraw-Hill Book Co., New York.

Badger, W.L& Banchero, J.T, 1995, "Introduction to Chemical Engineering Asian Student", 5th ed, McGraw Hill Book Company, Inc., New York.

Brown, G.G, 1961, "Unit Operations", John Wiley & Sons, Inc., New York.

Brownell, L.E, Young, E.H, 1959, "Process Equipment Design", John Wiley and Sons, Inc., New York.

Foust, A.S, Wenzel, L.A, Clump, C.W, Maus, L, Andersen, L.B, 1960, "Principles of Unit Operations", 2nd edition, John Wiley and Sons, Inc., New York.

Garret, D.E., 1989, "Chemical Engineering Economics", Van Nostrand Reinhold, New York.

Geankoplis, C.J, 1993, "Transport Process and Unit Operation", 3rd edition, Prentice-Hall, Inc., Englewood Clidd, N.J.

Himmelblau, D.M, 1989, "Basic Principles and Calculation in Chemical Engineering", 4th edition, Prentice Hall, Inc., New Jersey.

Hesse, Herman C., 1945, "Process Equipment Design", D. Van Nostrand Company, Inc., Princeton, New Jersey, USA.

Kern, D.Q., 1988, "Process Heat Transfer", International Edition, McGraw Hill, Inc., Auckland.

Othmer, Kirk, 1983, "Encyclopedia of Chemical Technology", Volume 23, 3rd edition, John Wiley and Sons, New York.

Othmer, Kirk, 1983, "Encyclopedia of Chemical Technology", Volume 4, 3rd edition, John Wiley and Sons, New York.

Ludwig, E.E., 1984, "Applied Process Design for Chemical and Petrochemical Plant", Volume 2, 2nd edition, Gulf Publishing Company, Houston.

McCabe, W.L., Smith, J.E., Harriot, P., 1985, "Unit Operation of Chemical Engineering", 6th ed., McGraw-Hill Book Co., New York

Perry, J.H., 1950, "Chemical Engineer's Handbook", 3rd edition, McGraw Hill, Inc., New York.

Perry , R.H., Chilton, C.H., 1973, "Chemical Engineer's Handbook", 5th edition, McGraw Hill, Inc., Kogakusha, Tokyo.

Perry, R.H., Green, D.W., 1999, "Perry's Chemical Engineer's Handbook", 7th edition, McGraw Hill, Inc., New York.

Peters, M.S., Timmerhaus, K.D., 1985, "Plant Design and Economics for Chemical Engineers", 4th edition, McGraw-Hill, Inc., Singapore.

Severn, W.H., Degler, H.E., Miles, J.C., 1959, "Steam, Air, and Gas Power", 5th edition, John Wiley and Sons Company, New York.

Smith, J.M., Van Ness, H.C., 1987, "Introduction to Chemical Engineering Thermodynamics", 4th edition, McGraw Hill Book, Inc., Singapore.

Reid, C.R., Prausnitz, M.J, Poling, E.B, 1988, "The Properties of Gases & Liquids", 4th edition, McGraw-Hill Book Company, Singapore.

Ullmann, 1989, "Ullmann's Encyclopedia of Industrial Chemistry", ed.5, VCH publishers, New York.

Ulrich, G.D., 1984, "A Guide to Chemical Engineering Process Design and Economics", John Wiley and Son's, Singapore.

Vilbrandt, F.C., Dryden, C.E., 1959., "Chemical Engineering Plant Design", 4th edition, McGraw Hill International Book Company, Tokyo.

Walas, S.M., 1990, "Chemical Process Equipment", Butterwarth Heineman, Mewton, M.A.